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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,729	09/18/2003	Arihiro Takeda	1117.68339	5616

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Patrick G. Burns, Esq.  
GREER, BURNS & CRAIN, LTD.  
Suite 2500  
300 South Wacker Dr.  
Chicago, IL 60606

EXAMINER
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DUONG, THOI V

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/664,729

Applicant(s)

TAKEDA ET AL.

Examiner

Thoi V. Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 27-31 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-31 ~~is/are~~ rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 10/047,216.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 16, 2005 has been entered.

Accordingly, claim 27 was amended, and claims 1-26, 32 and 33. Currently, claims 27-31 are pending in this application.

### ***Claim Objections***

2. Claim 27 is objected to because of the following informalities: claim 27 should be labeled as "Amended" instead of "Previously Presented". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

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Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 27-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Song et al. (USPN 6,710,837 B1).

Re claim 27, Song et al. discloses a liquid crystal display device comprising:

a first substrate 10 (TFT substrate) having thereon a pixel electrode 200 and an active element (Figs. 20A-20D; col. 11, line 65 through col. 12, line 15);

a second substrate 20 (color filter substrate) having thereon an opposed electrode 130 (see Figs. 19A-19E; col. 11, lines 58-64); and

a liquid crystal layer interposed between said first and second substrates with said electrodes facing each other (col. 12, lines 15-23),

wherein, as shown in Figs. 17 and 18, a first orientation control element (horizontal portion of 252 of a crossed-shaped aperture 250 or horizontal portion of protrusion pattern 170) extending in a nonparallel direction (direction 333) relative to an extending direction of an edge of said pixel electrode 200 (direction 444) and a second orientation control element (vertical portion of a protrusion pattern 170) extending in a parallel direction relative to an extending direction of said edge (direction 444) are provided on at least one of said first and second substrates (substrate 20 in Fig. 19E); and

said second orientation control element is constituted by an assembly of plural orientation control elements (protrusions of the protrusion pattern 170 connected together along the edge of the pixel electrode 200 in the direction 444) having directivity in the same direction (direction 444) in a direction of the substrate 20's plane surface (see also Fig. 19E and the annotated Fig. 18),

where re claim 28, said second orientation control element is formed to extend in an outer direction from said first orientation control element (horizontal portion of protrusion pattern 170) which is adjacent to said second control element on the same substrate 20 (see the annotated Fig. 18);

wherein, re claim 29, said first orientation control element (horizontal portion of 252 of a crossed-shaped aperture 250) is a slit (aperture) formed in said pixel electrode 200 (col. 9, lines 65-67);

wherein, re claim 30, said second orientation control elements is a protrusion formed on said opposed electrode 130 (Fig. 19E); and

wherein, re claim 31, a dielectric anisotropy of said liquid crystal molecules of said liquid crystal layer is negative (col. 12, lines 19-23).

### ***Response to Arguments***

5. Applicant's arguments filed June 16, 2005 have been fully considered but they are not persuasive.

Applicant argued that Song could not read upon the present invention since the pattern 170 from Song is shown to extend in many directions in the direction of the substrate plane, and not the same direction, as now more clearly recited in claim 27.

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The Examiner disagrees with Applicant's remarks since Figs. 17, 18 and 19E of Song (see also the annotated Fig. 18 attached) clearly show that the vertical portion of the protrusion pattern 170 is an assembly of plurality orientation control elements which are connected together along the edge of the pixel electrode 200 in the direction 444 on the substrate 20. Accordingly, these orientation control elements have directivity in the same direction (direction 444) in a direction of the substrate 20's plane surface.

Thus, Song can still read upon the present invention.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (571) 272-2293.

Thoi Duong *TS*

08/25/2005

  
DUNG T. NGUYEN  
PRIMARY EXAMINER